Abstract Submitted for the APR12 Meeting of The American Physical Society

Electromagnetic Gyrokinetic Simulations of ITG Mode in Tokamak Plasmas. IHOR HOLOD, University of California, Irvine — Global gyrokinetic simulations of ion temperature gradient (ITG) mode and kinetic ballooning mode (KBM) are performed using GTC code with fluid-kinetic hybrid electron model, focusing on the plasma edge physics. Linear analysis of single and multiple toroidal mode number ITG is presented. Transition from ITG to KBM is observed with increasing β_e . Effect of kinetic electrons is investigated.

Ihor Holod University of California, Irvine

Date submitted: 06 Jan 2012 Electronic form version 1.4